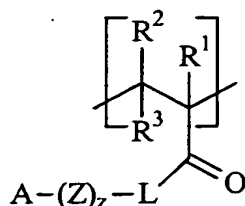


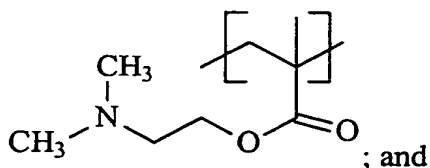
What is claimed is:

1. A detergent composition comprising:
 - a) an effective amount of a polymeric suds stabilizer comprising at least one monomeric unit of the formula:

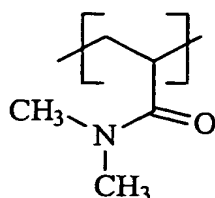


wherein each of R^1 , R^2 and R^3 are independently selected from the group consisting of hydrogen, C_1 to C_6 alkyl, and mixtures thereof; L is selected from the group consisting of a bond, O, NR^6 , SR^7R^8 and mixtures thereof, wherein R^6 is selected from the group consisting of hydrogen, C_1 to C_8 alkyl and mixtures thereof; each of R^7 and R^8 are independently hydrogen, O, C_1 to C_8 alkyl and mixtures thereof, or SR^7R^8 form a heterocyclic ring containing from 4 to 7 carbon atoms, optionally containing additional hetero atoms and optionally substituted; Z is selected from the group consisting of: $-(\text{CH}_2)-$, $(\text{CH}_2-\text{CH}=\text{CH})-$, $-(\text{CH}_2-\text{CHOH})-$, $(\text{CH}_2-\text{CHNR}^6)-$, $-(\text{CH}_2-\text{CHR}^{14}-\text{O})-$ and mixtures thereof; wherein R^{14} is selected from the group consisting of hydrogen, C_1 to C_6 alkyl and mixtures thereof; z is an integer selected from 0 to 12; A is NR^4R^5 , wherein each of R^4 and R^5 are independently selected from the group consisting of hydrogen, C_1 to C_8 alkyl, and mixtures thereof, or NR^4R^5 form an heterocyclic ring containing from 4 to 7 carbon atoms, optionally containing additional hetero atoms, optionally fused to a benzene ring, and optionally substituted by C_1 to C_8 hydrocarbyl; and wherein said polymeric suds stabilizer has a molecular weight of from 1,000 to 2,000,000 daltons;

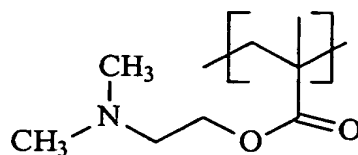
- b) a deterative surfactant; and
 - c) the balance carriers and other adjunct ingredients;
2. A composition according to Claim 1, wherein said polymeric suds stabilizer has a molecular weight of from 5,000 to 1,000,000.
3. A composition according to either Claim 1 or 2, wherein said polymeric suds stabilizer is a copolymer of:
 - i)



ii)

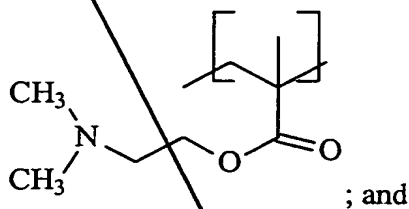


4. A composition according to either Claim 1 or 2, wherein said polymeric suds stabilizer is a homopolymer of:

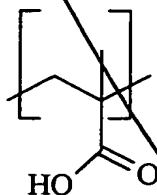


5. A composition according to either Claim 1 or 2, wherein said polymeric suds stabilizer is a copolymer of:

i)

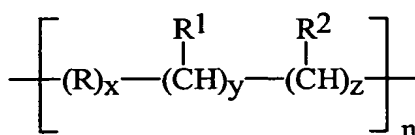


ii)



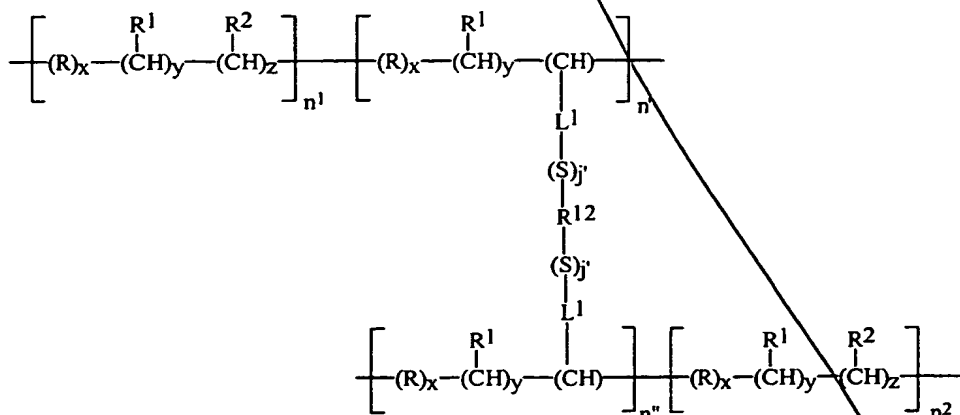
6. A detergent composition comprising:
- an effective amount of a proteinaceous suds stabilizer, said stabilizer having an isoelectric point of from 7.5 to 11.5;
 - an effective amount of a deterative surfactant; and

- c) the balance carriers and other adjunct ingredients;
7. A detergent composition comprising:
- a) an effective amount of a zwitterionic polymeric suds stabilizer;
- b) an effective amount of a deterative surfactant; and
- c) the balance carriers and other adjunct ingredients;
8. A composition according to Claim 7 wherein said zwitterionic polymeric suds stabilizer has the formula:



wherein R is C₁-C₁₂ linear alkylene, C₁-C₁₂ branched alkylene, and mixtures thereof; R¹ is a unit capable of having a negative charge at a pH of from 4 to 12; R² is a unit capable of having a positive charge at a pH of from 4 to 12; n has a value such that said zwitterionic polymers suds stabilizer has an average molecular weight of from 1,000 to 2,000,000 daltons; x is from 0 to 6; y is 0 or 1; and z is 0 or 1.

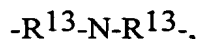
9. A composition according to either Claim 7 or 8, wherein said zwitterionic polymeric suds stabilizer has an average molecular weight of from 5,000 to 1,000,000 daltons.
10. A composition according to any one of Claims 7 to 9, wherein said zwitterionic polymeric suds stabilizer has the formula:



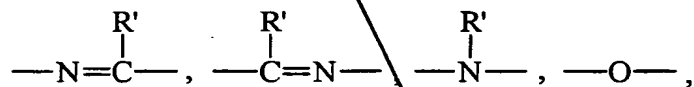
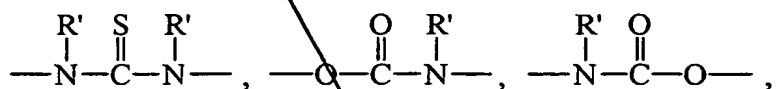
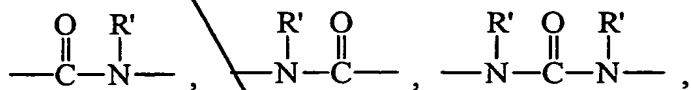
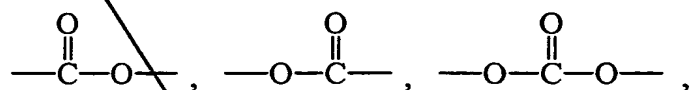
BIOGRAPHICAL

A,
Cont

wherein R is C₁-C₁₂ linear alkylene, C₁-C₁₂ branched alkylene, and mixtures thereof; R¹ is a unit capable of having a negative charge at a pH of from 4 to 12; R² is a unit capable of having a positive charge at a pH of from 4 to 12; C₁-C₁₂ linear alkylene amino alkylene having the formula:



L¹, and mixtures thereof, wherein each R¹³ is independently L¹, ethylene, and mixtures thereof; each S is independently selected from C₁-C₁₂ linear alkylene, C₁-C₁₂ branched alkylene, C₃-C₁₂ linear alkenylene, C₃-C₁₂ branched alkenylene, C₃-C₁₂ hydroxyalkylene, C₄-C₁₂ dihydroxyalkylene, C₆-C₁₀ arylene, C₈-C₁₂ dialkylarylene, $-(R^5O)_kR^5-$, $-(R^5O)_kR^6(OR^5)_k-$, $-CH_2CH(OR^7)CH_2-$, and mixtures thereof; L¹ is a linking unit independently selected from the following:



and mixtures thereof; n¹ + n² has a value such that said zwitterionic polymers suds stabilizer has an average molecular weight of from 1,000 to 2,000,000 daltons; n' is equal to n'' and further n' + n'' is less than or equal to 5% or the value n¹ + n²; x is 0 to 6; y is 0 or 1; and z is 0 or 1.

11. A detergent composition comprising:

- a) an effective amount of a polymeric suds stabilizer, said stabilizer comprising:
 - i) units capable of having a cationic charge at a pH of from 4 to 12; provided that said suds stabilizer has an average cationic charge density of at least 1 unit per 100 daltons molecular weight at a pH of from 4 to 12;
- b) an effective amount of a deterative surfactant; and

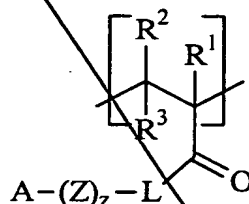
c) the balance carriers and other adjunct ingredients;

12. A composition according to Claim 11 wherein said polymeric suds stabilizer (a) further comprises:

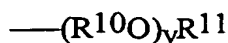
- ii) units capable of having an anionic charge at a pH of from 4 to 12;
- iii) units capable of having an anionic charge and a cationic charge at a pH of from 4 to 12;
- iv) units having no charge at a pH of from 4 to 12; and
- v) mixtures of units (i), (ii), (iii), and (iv);

13. A composition according to either Claim 11 or 12, wherein said polymeric suds stabilizer has an average molecular weight of from 1,000 to 2,000,000 daltons.

14. A composition according to any one of Claims 11 to 13, wherein said polymeric suds stabilizer (a) is a polymer comprising at least one monomeric unit of the formula:

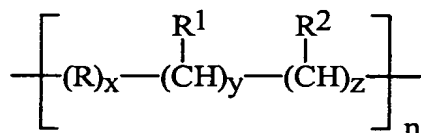


wherein each of R^1 , R^2 and R^3 are independently selected from the group consisting of hydrogen, C_1 to C_6 alkyl, and mixtures thereof; L is selected from the group consisting of a bond, O, NR^6 , SR^7R^8 and mixtures thereof, wherein R^6 is selected from the group consisting of hydrogen, C_1 to C_8 alkyl and mixtures thereof; each of R^7 and R^8 are independently hydrogen, O, C_1 to C_8 alkyl and mixtures thereof, or SR^7R^8 form a heterocyclic ring containing from 4 to 7 carbon atoms, optionally containing additional hetero atoms and optionally substituted; Z is selected from the group consisting of: $-(\text{CH}_2)-$, $(\text{CH}_2-\text{CH}=\text{CH})-$, $-(\text{CH}_2-\text{CHOH})-$, $(\text{CH}_2-\text{CHNR}^6)-$, $-(\text{CH}_2-\text{CHR}^{14}-\text{O})-$ and mixtures thereof; wherein R^{14} is selected from the group consisting of hydrogen, C_1 to C_6 alkyl, and mixtures thereof; z is an integer selected from 0 to 12; A is NR^4R^5 , wherein each of R^4 and R^5 are independently selected from the group consisting of hydrogen, C_1 - C_8 linear or branched alkyl, alkyleneoxy having the formula:



wherein R¹⁰ is C₂-C₄ linear or branched alkylene, and mixtures thereof; R¹¹ is hydrogen, C₁-C₄ alkyl, and mixtures thereof; y is from 1 to 10; or NR⁴R⁵ form a heterocyclic ring containing from 4 to 7 carbon atoms, optionally containing additional hetero atoms, optionally fused to a benzene ring, and optionally substituted by C₁ to C₈ hydrocarbyl; and wherein said polymeric suds stabilizer has a molecular weight of from 1,000 to 2,000,000 daltons.

15. A composition according to any one of Claims 11 to 13, wherein said polymeric suds stabilizer (a) is a zwitterionic polymeric suds stabilizer of the formula:



wherein R is C₁-C₁₂ linear alkylene, C₁-C₁₂ branched alkylene, and mixtures thereof; R¹ is a unit capable of having a negative charge at a pH of from 4 to 12; R² is a unit capable of having a positive charge at a pH of from 4 to 12; n has a value such that said zwitterionic polymers suds stabilizer has an average molecular weight of from 1,000 to 2,000,000 daltons; x is from 0 to 6; y is 0 or 1; and z is 0 or 1.

16. A composition according to any one of Claims 1 to 15 wherein said polymeric suds stabilizer is selected from the group consisting of a homopolymer, a copolymer and a terpolymer.
17. A composition according to any one of Claims 1 to 16 wherein said deterative surfactant is selected from the group consisting of anionic, nonionic, amphoteric, zwitterionic, cationic, and mixtures thereof.
18. A composition according to any of Claims 1 to 17 wherein said composition is selected from the group consisting of granules, tablets, liquids, liqui-gels, gels, microemulsion, thixotropic liquid, bars, pastes, powders and mixtures thereof.
19. A composition according to any of Claims 1 to 18 wherein said composition is selected from the group consisting of, liquid laundry compositions, liquid hard

surface cleaning compositions, automatic dishwashing compositions, fabric softening compositions, rinse aid compositions, and mixtures thereof.

20. A composition according to any of Claims 1 to 18 wherein said composition is a personal cleansing composition, and wherein said personal cleansing composition further comprises a conventional personal cleansing additive.
21. A composition according to any one of Claims 1 to 19 wherein said composition is a nonaqueous, liquid, heavy-duty detergent composition in the form of a stable suspension of solid, substantially insoluble particulate material dispersed throughout a structured, surfactant-containing liquid phase, wherein said nonaqueous, liquid, heavy-duty detergent composition further comprises:
from 55% to 98.9% by weight of the composition of a structured, surfactant-containing liquid phase formed by combining:
i) from 1% to 80% by weight of said liquid phase of one or more nonaqueous organic diluents; and
ii) from 20% to 99% by weight of said liquid phase of a surfactant system comprising surfactants selected from the group consisting of anionic, nonionic, cationic surfactants and combinations thereof;
22. A composition according to any one of Claims 1 to 19 wherein said composition is an aqueous based heavy-duty liquid detergent composition, wherein said aqueous based heavy-duty detergent composition further comprises:
A) from 5% to 70%, by weight of composition, of a surfactant system
B) from 0.1 to 8% of a co-surfactant composition selected from the group consisting of alkyl polyhydroxy fatty acid amide, alkyl amidopropyl dimethyl amine and mixtures thereof; and
C) from 30% to 95%, of an aqueous liquid carrier.
23. A composition according to any one of Claims 1 to 19 wherein said composition is an laundry bar composition, wherein said laundry bar further comprises detergent additives selected from the group consisting of builders, bleaching compounds, polymeric dispersing agents, anti-redeposition agents polymeric soil release agents, enzymes, surfactants and mixture thereof.

24. A composition according to any one of Claims 1 to 19 wherein said composition is a granular laundry detergent composition, wherein said granular laundry composition further comprises detergent additives selected from the group consisting of builders, bleaching compounds, polymeric dispersing agents, anti-redeposition agents polymeric soil release agents, enzymes, surfactants and mixture thereof.

00979563-111401